

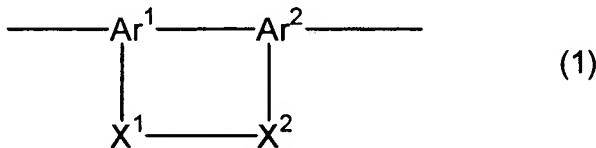
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AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A polymer light emitting material which contains a polymer compound comprising a repeating unit of the following formula (1) or (2) and having a polystyrene-reduced number-average molecular weight of 10^3 to 10^8 , and which exhibits light emission from the triplet excited state.

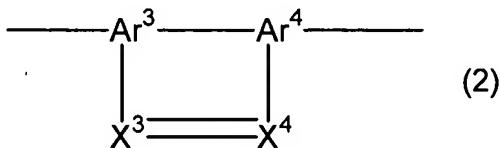


[wherein Ar¹ and Ar² each independently represent a trivalent aromatic hydrocarbon group or a trivalent heterocyclic group.—;

X¹ and X² each independently represent O, S, C(=O), S(=O), SO₂, C(R¹)(R²), Si(R³)(R⁴), N(R⁵), B(R⁶), P(R⁷) or P(=O)(R⁸), (wherein R¹, R², R³, R⁴, R⁵, R⁶, R⁷ and R⁸ each independently represent a hydrogen atom, halogen atom, alkyl group, alkyloxy group, alkylthio group, aryl group, aryloxy group, arylthio group, arylalkyl group, arylalkyloxy group, arylalkylthio group, acyl group, acyloxy group, amide group, acid imide group, imine residue, amino group, substituted amino group, substituted silyl group, substituted silyloxy group, substituted silylthio group, substituted silylaminogroup, monovalent heterocyclic group, heteroaryloxy group, heteroarylthio group, arylalkenyl group, arylethynyl group, carboxyl group, alkoxy carbonyl group, aryloxycarbonyl group, arylalkyloxycarbonyl group, heteroaryloxycarbonyl group or cyano group.—;

(R¹ and R²) or (R³ and R⁴) may mutually be connected to form a ring); wherein X¹ and X² are not the same excepting the case of S or Si(R³)(R⁴).—];

X^1 and Ar^2 bond to adjacent carbon atoms in the aromatic ring of Ar^1 , and X^2 and Ar^1 bond to adjacent carbon atoms in the aromatic ring of Ar^2 ;



[wherein Ar^3 and Ar^4 each independently represent a trivalent aromatic hydrocarbon group or a trivalent heterocyclic group.—;

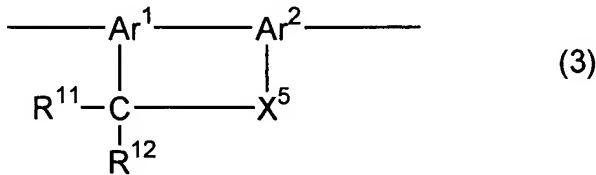
X^3 and X^4 each independently represent N, B, P, C(R^9) or Si(R^{10}), (wherein R^9 and R^{10} each independently represent a hydrogen atom, halogen atom, alkyl group, alkyloxy group, alkylthio group, aryl group, aryloxy group, arylthio group, arylalkyl group, arylalkyloxy group, arylalkylthio group, acyl group, acyloxy group, amide group, acid imide group, imine residue, amino group, substituted amino group, substituted silyl group, substituted silyloxy group, substituted silylthio group, substituted silyl amino group, monovalent heterocyclic group, heteroaryloxy group, heteroarylthio group, arylalkenyl group, arylethynyl group, carboxyl group, alkoxy carbonyl group, aryloxycarbonyl group, arylalkyloxycarbonyl group, heteroaryl-oxycarbonyl group or cyano group).—];

X^3 and X^4 are not the same.—; and

X^3 and Ar^4 bond to adjacent carbon atoms in the aromatic ring of Ar^3 , and X^4 and Ar^3 bond to adjacent carbon atoms in the aromatic ring of Ar^4].

2. (original): The polymer light emitting material according to Claim 1, wherein X^1 in the formula (1) is C(R^1)(R^2), Si(R^3)(R^4), N(R^5), B(R^6), P(R^7) or P(=O)(R^8) (wherein, R^1 to R^8 represent the same meaning as defined above).

3. (currently amended): The polymer light emitting material according to Claim 1 or 2, wherein the repeating unit represented by the formula (1) defined above is a repeating unit represented by following formula (3):

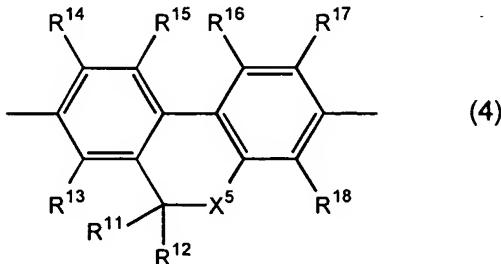


[wherein Ar¹ and Ar² represent the same meaning as defined above;—;

R¹¹ and R¹² each independently represent a hydrogen atom, halogen atom, alkyl group, aryl group, arylalkyl group or monovalent heterocyclic group; R¹¹ and R¹² may mutually be connected to form a ring;—; and

X⁵ represents O, S, C(=O), S(=O), SO₂, Si(R³)(R⁴), N(R⁵), B(R⁶), P(R⁷) or P(=O)(R⁸) (wherein, R³, R⁴, R⁵, R⁶, R⁷ and R⁸ represent the same meaning as defined above)].

4. (currently amended): The polymer light emitting material according to Claim 3, wherein the repeating unit represented by the formula (3) defined above is a repeating unit represented by following formula (4):



[wherein X⁵, R¹¹ and R¹² represent the same meaning as defined above. R¹³, R¹⁴, R¹⁵, R¹⁶, R¹⁷ and R¹⁸ each independently represent a hydrogen atom, halogen atom, alkyl group, alkyloxy group, alkylthio group, aryl group, aryloxy group, arylthio group, arylalkyl group, arylalkyloxy group, arylalkylthio group, acyl group, acyloxy group, amide group, acid imide group, imine

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residue, amino group, substituted amino group, substituted silyl group, substituted silyloxy group, substituted silylthio group, substituted silylaminogroup, monovalent heterocyclic group, heteroaryloxy group, heteroarylthio group, arylalkenyl group, arylethynyl group, carboxyl group, alkoxy carbonyl group, aryloxycarbonyl group, arylalkyloxycarbonyl group, heteroaryloxycarbonyl group or cyano group.—; and

(R¹⁴ and R¹⁵) or (R¹⁶ and R¹⁷) may mutually be connected to form a ring].

5. (original): The polymer light emitting material according to Claim 4 wherein X⁵ is an oxygen atom.

6. (currently amended): The polymer light emitting material according to ~~any of Claims 1 to 5~~Claim 1, further having a repeating unit represented by the following formula (5), (6), (7) or (8):

—Ar⁵— (5)

—Ar⁵—X⁶—(Ar⁶—X⁷)_a—Ar⁷— (6)

—Ar⁵—X⁷— (7)

—X⁷— (8)

[wherein Ar⁵, Ar⁶ and Ar⁷ each independently represent an arylene group, divalent heterocyclic group or divalent group having a metal complex structure.—;]

X⁶ represents —C≡C—, —N(R²¹)— or —(SiR²²R²³)_y—;—;

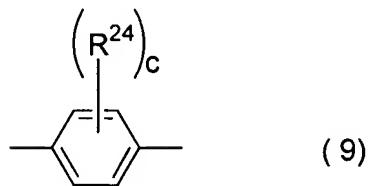
X⁷ represents —CR¹⁹=CR²⁰—, —C≡C—, —N(R²¹)— or —(SiR²²R²³)_y—;—;

R¹⁹ and R²⁰ each independently represent a hydrogen atom, alkyl group, aryl group, monovalent heterocyclic group, carboxyl group, alkoxy carbonyl group, aryloxycarbonyl group, arylalkyloxycarbonyl group, heteroaryloxycarbonyl group or cyano group.—;—;

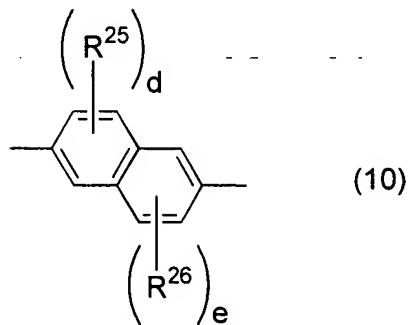
R²¹, R²² and R²³ each independently represent a hydrogen atom, alkyl group, aryl group, monovalent heterocyclic group or arylalkyl group.—; and

a represents an integer of 0 or 1 and b represents an integer of 1 to 12].

7. (currently amended): The polymer light emitting material according to Claim 6 wherein the formula (5) is a repeating unit represented by the following formula (9), (10), (11), (12), (13) or (14):



[wherein R^{24} represents a halogen atom, alkyl group, alkyloxy group, alkylthio group, aryl group, aryloxy group, arylthio group, arylalkyl group, arylalkyloxy group, arylalkylthio group, acyl group, acyloxy group, amide group, acid imide group, imine residue, amino group, substituted amino group, substituted silyl group, substituted silyloxy group, substituted silylthio group, substituted silylamino group, monovalent heterocyclic group, heteroaryloxy group, heteroarylthio group, arylalkenyl group, arylethynyl group, carboxyl group, alkoxy carbonyl group, aryloxycarbonyl group, arylalkyloxycarbonyl group, heteroaryloxycarbonyl group or cyano group. c represents an integer of 0 to 4];

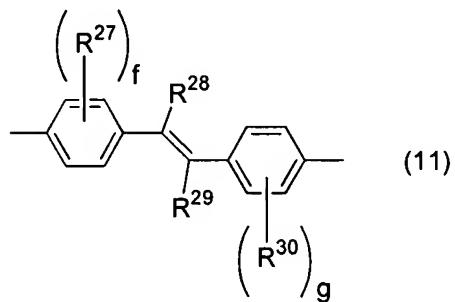


[wherein R^{25} and R^{26} each independently represent a halogen atom, alkyl group, alkyloxy group, alkylthio group, aryl group, aryloxy group, arylthio group, arylalkyl group, arylalkyloxy group, arylalkylthio group, acyl group, acyloxy group, amide group, acid imide group, imine residue, amino group, substituted amino group, substituted silyl group, substituted silyloxy group,

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substituted silylthio group, substituted silylamino group, monovalent heterocyclic group, heteroaryloxy group, heteroarylthio group, arylalkenyl group, arylethynyl group, carboxyl group, alkoxycarbonyl group, aryloxycarbonyl group, arylalkyloxycarbonyl group, heteroaryloxycarbonyl group or cyano group.—;

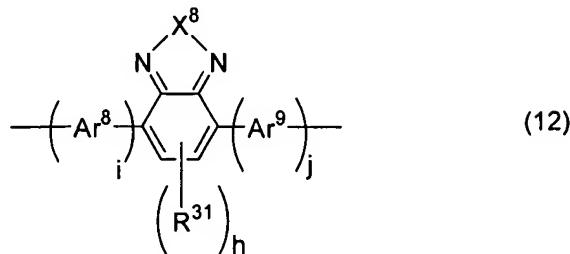
d and e each independently represent an integer of 0 to 3];



[wherein R²⁷ and R³⁰ each independently represent a halogen atom, alkyl group, alkyloxy group, alkylthio group, aryl group, aryloxy group, arylthio group, arylalkyl group, arylalkyloxy group, arylalkylthio group, acyl group, acyloxy group, amide group, acid imide group, imine residue, amino group, substituted amino group, substituted silyl group, substituted silyloxy group, substituted silylthio group, substituted silylamino group, monovalent heterocyclic group, heteroaryloxy group, heteroarylthio group, arylalkenyl group, arylethynyl group, carboxyl group, alkoxycarbonyl group, aryloxycarbonyl group, arylalkyloxycarbonyl group, heteroaryloxycarbonyl group or cyano group.—;

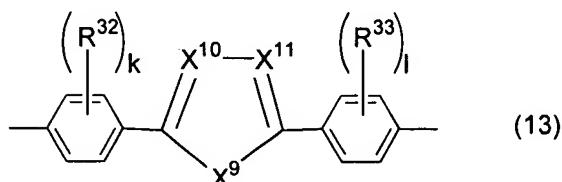
R²⁸ and R²⁹ each independently represent a hydrogen atom, alkyl group, aryl group, monovalent heterocyclic group, carboxyl group, alkoxycarbonyl group, aryloxycarbonyl group, arylalkyloxycarbonyl group, heteroaryloxycarbonyl group or cyano group];

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[wherein R^{31} represents a halogen atom, alkyl group, alkyloxy group, alkylthio group, aryl group, aryloxy group, arylthio group, arylalkyl group, arylalkyloxy group, arylalkylthio group, acyl group, acyloxy group, amide group, acid imide group, imine residue, amino group, substituted amino group, substituted silyl group, substituted silyloxy group, substituted silylthio group, substituted silylamino group, monovalent heterocyclic group, heteroaryloxy group, heteroarylthio group, arylalkenyl group, arylethynyl group, carboxyl group, alkoxy carbonyl group, aryloxycarbonyl group, arylalkyloxycarbonyl group, heteroaryloxycarbonyl group or cyano group—; h represents an integer of 0 to 2. Ar^8 and Ar^9 each independently represent an arylene group, divalent heterocyclic group or divalent group having a metal complex structure—; i and j each independently represent an integer of 0 or 1—; X^8 represents O, S, SO, SO₂, Se or Te];

h represents an integer of 0 to 2. Ar^8 and Ar^9 each independently represent an arylene group, divalent heterocyclic group or divalent group having a metal complex structure—; i and j each independently represent an integer of 0 or 1—; X^8 represents O, S, SO, SO₂, Se or Te];



[wherein R^{32} and R^{33} each independently represent a halogen atom, alkyl group, alkyloxy group, alkylthio group, aryl group, aryloxy group, arylthio group, arylalkyl group, arylalkyloxy group, arylalkylthio group, acyl group, acyloxy group, amide group, acid imide group, imine residue, amino group, substituted amino group, substituted silyl group, substituted silyloxy group, substituted silylthio group, substituted silylamino group, monovalent heterocyclic group, heteroaryloxy group, heteroarylthio group, arylalkenyl group, arylethynyl group, carboxyl group, alkoxy carbonyl group, aryloxycarbonyl group, arylalkyloxycarbonyl group, heteroaryloxycarbonyl group or cyano group—; k and l each independently represent an integer of 0 or 1—; X^9 represents O, S, SO, SO₂, Se or Te];

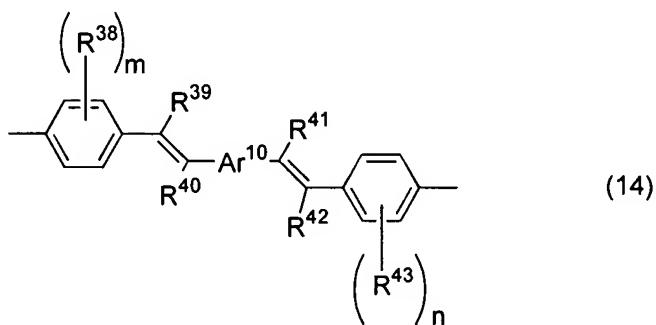
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alkoxycarbonyl group, aryloxycarbonyl group, arylalkyloxycarbonyl group, heteroaryloxycarbonyl group or cyano group.—;

k and l each independently represent an integer of 0 to 4.—;

X⁹ represents O, S, SO, SO₂, Se, Te, N—R³⁴ or SiR³⁵R³⁶—;

X¹⁰ and X¹¹ each independently represent N or C—R³⁷. R³⁴, R³⁵, R³⁶ and R³⁷ each independently represent a hydrogen atom, alkyl group, aryl group, arylalkyl group or monovalent heterocyclic group]; and



[wherein R³⁸ and R⁴³ each independently represent a halogen atoms, alkyl group, alkyloxy group, alkylthio group, aryl group, aryloxy group, arylthio group, arylalkyl group, arylalkyloxy group, arylalkylthio group, acyl group, acyloxy group, amide group, acid imide group, imine residue, amino group, substituted amino group, substituted silyl group, substituted silyloxy group, substituted silylthio group, substituted silyl amino group, monovalent heterocyclic group, heteroaryloxy group, heteroarylthio group, arylalkenyl group, arylethynyl group, carboxyl group, alkoxycarbonyl group, aryloxycarbonyl group, arylalkyloxycarbonyl group, heteroaryloxycarbonyl group or cyano group.—;

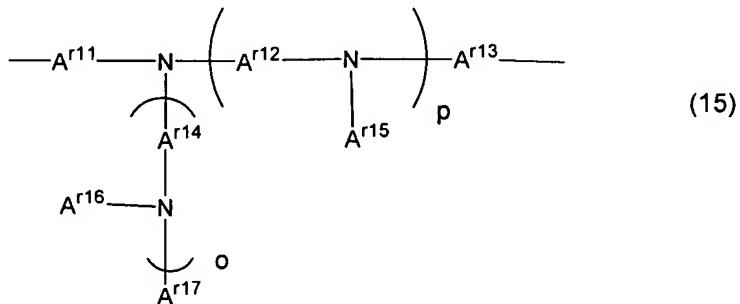
m and n each independently represent an integer of 0 to 4.—;

R³⁹, R⁴⁰, R⁴¹ and R⁴² each independently represent a hydrogen atom, alkyl group, aryl group, monovalent heterocyclic group, carboxyl group, alkoxycarbonyl group, aryloxycarbonyl group, arylalkyloxycarbonyl group, heteroaryloxycarbonyl group or cyano group.—and

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Ar^{10} represents an arylene group, divalent heterocyclic group or divalent group having a metal complex structure].

8. (currently amended): The polymer light emitting material according to Claim 6 wherein the repeating unit represented by the above defined formula (5) is a repeating unit represented by formula (15):



[wherein Ar^{11} , Ar^{12} , Ar^{13} and Ar^{14} each independently represent an arylene group or divalent heterocyclic group;—;

Ar^{15} , Ar^{16} and Ar^{17} each independently represent an arylene group or monovalent heterocyclic group.—; and

o and p each independently represent an integer of 0 or 1, and $0 \leq \text{o} + \text{p} \leq 1$].

9. (currently amended): The polymer light emitting material according to ~~any of Claims 1 to 8~~Claim 1 wherein the total amount of the repeating unit represented by the formulas (1) and (2) is 10 % by mole or more based on an amount of whole repeating units.

10. (currently amended): The polymer light emitting material according to ~~any of Claims 1 to 9~~Claim 1 further including at least one kind of materials selected from a hole transporting material, an electron transporting material and a light emitting material.

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11. (currently amended): The polymer light emitting material according to ~~any of~~ ~~Claims 1 to 10~~ Claim 1 comprising a compound exhibiting light emission from the triplet excited state in the form of a composition with a polymer compound having a repeating unit represented by the formula (1) or (2).

12. (currently amended): The polymer light emitting material according to ~~any of~~ ~~Claims 1 to 10~~ Claim 1 having a structure exhibiting light emission from the triplet excited state at a side chain of a polymer compound having a repeating unit represented by the formula (1) or (2).

13. (currently amended): The polymer light emitting material according to ~~any of~~ ~~Claims 1 to 10~~ Claim 1 having a structure exhibiting light emission from the triplet excited state at a main chain of a polymer compound having a repeating unit represented by the formula (1) or (2).

14. (currently amended): The polymer light emitting material according to ~~any of~~ ~~Claims 1 to 10~~ Claim 1 having a structure exhibiting light emission from the triplet excited state at an end of a polymer compound having a repeating unit represented by the formula (1) or (2).

15. (currently amended): The polymer light emitting material according to ~~any of~~ ~~Claims 11 to 14~~ Claim 11, wherein a compound or structure exhibiting light emission from the triplet excited state is a metal complex.

16. (currently amended): An ink composition comprising a polymer light emitting material according to ~~any one of~~ ~~Claims 1 to 15~~ Claim 1.

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17. (original): The ink composition according to Claim 16 having 1 to 100 mPa•s of viscosity at 25°C.

18. (currently amended): A light emitting thin film comprising a polymer light emitting material according to ~~any of Claims 1 to 15~~Claim 1.

19. (currently amended): A conductive thin film comprising a polymer light emitting material according to ~~any of Claims 1 to 15~~Claim 1.

20. (currently amended): An organic semiconductor thin film comprising a polymer light emitting material according to ~~any of Claims 1 to 15~~Claim 1.

21. (currently amended): A polymer light emitting device having a layer comprising a polymer light emitting material according to ~~any of Claims 1 to 15~~Claim 1 between electrodes consisting of an anode and a cathode.

22. (original): The polymer light emitting device according to Claim 21, wherein the light emission layer further comprises a hole transporting material, an electron transporting material or a light-emitting material.

23. (original): A flat light source comprising a polymer light emitting device according to any of Claims 21 to 22.

24. (original): A segment display comprising a polymer light emitting device according to any of Claims 21 to 22.

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25. (original): A dot matrix display comprising a polymer light emitting device according to any of Claims 21 to 22.

26. (original): A liquid crystal display comprising a backlight composed of a polymer light emitting device according to any of Claims 21 to 22.

27. (original): An illumination comprising a polymer light emitting device according to any of Claims 21 to 22.